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|              |            |        |   |
|--------------|------------|--------|---|
| NEWS         | 1          |        | Web Page for STN Seminar Schedule - N. America  |
| NEWS         | 2          | JUL 28 | CA/CAPLUS patent coverage enhanced  |
| NEWS         | 3          | JUL 28 | EPFULL enhanced with additional legal status information from the epline Register   |
| NEWS         | 4          | JUL 28 | IFICDB, IFIPAT, and IFIUIDB reloaded with enhancements  |
| NEWS         | 5          | JUL 28 | STN Viewer performance improved   |
| NEWS         | 6          | AUG 01 | INPADOCDB and INPAFAMDB coverage enhanced   |
| NEWS         | 7          | AUG 13 | CA/CAPLUS enhanced with printed Chemical Abstracts page images from 1967-1998   |
| NEWS         | 8          | AUG 15 | CAOLD to be discontinued on December 31, 2008   |
| NEWS         | 9          | AUG 15 | CAPLUS currency for Korean patents enhanced   |
| NEWS         | 10         | AUG 27 | CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information                   |
| NEWS         | 11         | SEP 18 | Support for STN Express, Versions 6.01 and earlier, to be discontinued  |
| NEWS         | 12         | SEP 25 | CA/CAPLUS current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances |
| NEWS         | 13         | SEP 26 | WPIDS, WPINDEX, and WPIX coverage of Chinese and Korean patents enhanced  |
| NEWS         | 14         | SEP 29 | IFICLS enhanced with new super search field   |
| NEWS         | 15         | SEP 29 | EMBASE and EMBAL enhanced with new search and display fields  |
| NEWS         | 16         | SEP 30 | CAS patent coverage enhanced to include exemplified prophetic substances identified in new Japanese-language patents            |
| NEWS         | 17         | OCT 07 | EPFULL enhanced with full implementation of EPC2000   |
| NEWS         | 18         | OCT 07 | Multiple databases enhanced for more flexible patent number searching   |
| NEWS         | 19         | OCT 22 | Current-awareness alert (SDI) setup and editing enhanced  |
| NEWS         | 20         | OCT 22 | WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT Applications  |
| NEWS         | 21         | OCT 24 | CHEMLIST enhanced with intermediate list of pre-registered REACH substances   |
| NEWS EXPRESS | JUNE 27 08 |        | CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.   |
| NEWS HOURS   |            |        | STN Operating Hours Plus Help Desk Availability   |
| NEWS LOGIN   |            |        | Welcome Banner and News Items   |
| NEWS IPC8    |            |        | For general information regarding STN implementation of IPC 8   |

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:28:20 ON 04 NOV 2008

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 10:28:30 ON 04 NOV 2008

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STRUCTURE FILE UPDATES: 2 NOV 2008 HIGHEST RN 1070028-20-4

DICTIONARY FILE UPDATES: 2 NOV 2008 HIGHEST RN 1070028-20-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

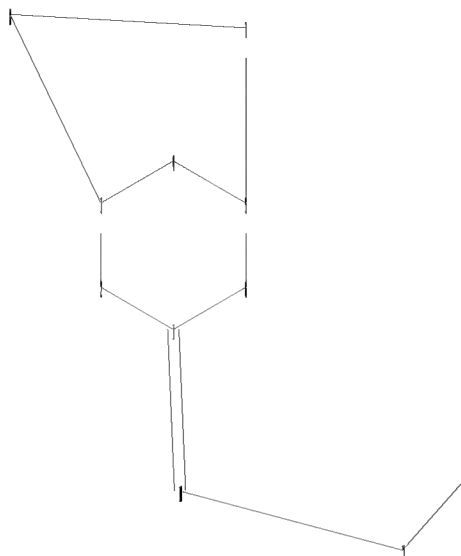
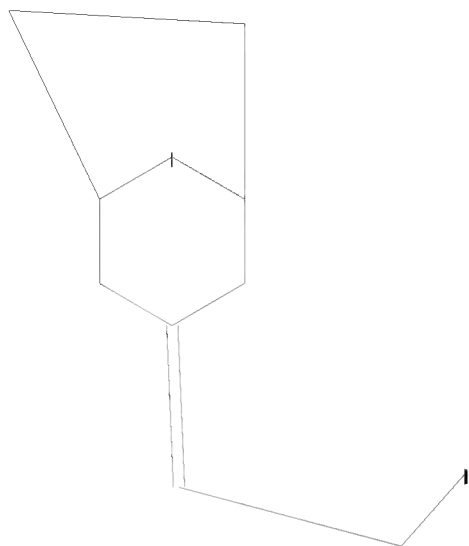
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10575837.str



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chain nodes :
10 11 12
ring nodes :
1 2 3 4 5 6 7 8
chain bonds :
1-10 10-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 3-8 4-5 5-6 5-7 7-8
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12
exact bonds :
1-10 3-8 5-7 7-8 10-11
isolated ring systems :
containing 1 :

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Match level :
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12:CLASS

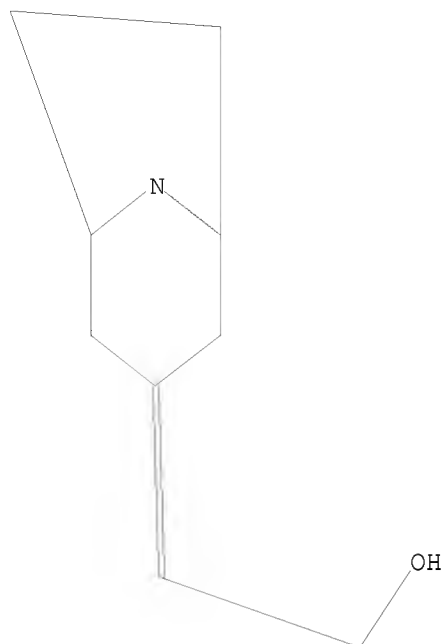
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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

FULL SEARCH INITIATED 10:28:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1593 TO ITERATE

100.0% PROCESSED 1593 ITERATIONS

33 ANSWERS

SEARCH TIME: 00.00.01

L2 33 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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178.57

FILE 'CAPLUS' ENTERED AT 10:28:58 ON 04 NOV 2008

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FILE COVERS 1907 - 4 Nov 2008 VOL 149 ISS 19

FILE LAST UPDATED: 3 Nov 2008 (20081103/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

=> s 12 full

L3            16 L2

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L3 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:110254 CAPLUS

DOCUMENT NUMBER: 148:331350

TITLE: Design and Synthesis of Potent Antileishmanial  
Cycloalkylidene-Substituted Ether Phospholipid  
Derivatives

AUTHOR(S): Calogeropoulou, Theodora; Angelou, Panagiotis; Detsi,  
Anastasia; Fragiadaki, Irene; Scoulica, Effie

CORPORATE SOURCE: Institute of Organic and Pharmaceutical Chemistry,  
National Hellenic Research Foundation, Athens, 11635,  
Greece

SOURCE: Journal of Medicinal Chemistry (2008), 51(4), 897-908  
CODEN: JMCMAR; ISSN: 0022-2623

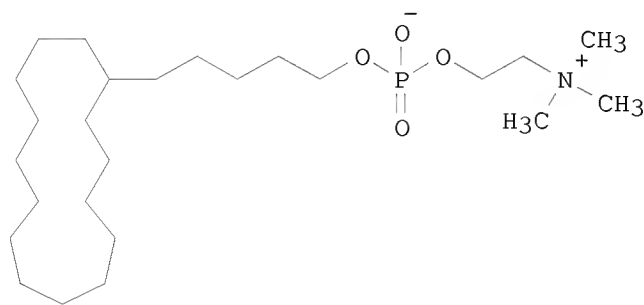
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:331350

GI



I

AB Two series of novel ether phospholipids (EPs) have been synthesized. The first includes cyclodecylidene- or cyclopentadecylidene-substituted EPs carrying N,N,N-trimethylammonium or N-methylpiperidino or N-methylmorpholino head groups. The second series encompasses more rigid head groups in combination with cycloalkylidene moieties in the lipid portion. In addition, hydrogenated derivs. were obtained. All the new analogs except one were 1.5- to 62-fold more potent than miltefosine against the intracellular *L. infantum*, and the most active ones were also less cytotoxic against the human monocytic cell line THP1 and less hemolytic than miltefosine. Some analogs combine high potency with low cytotoxicity and hemolytic activity. Cyclopentadecylpentylphosphocholine I possesses an IC<sub>50</sub> of 0.7  $\mu$ M against *L. infantum* amastigotes and is the least cytotoxic analog, since it does not present toxicity against THP1 macrophages, even at a concentration that is 800-fold the antiparasitic

IC<sub>50</sub> value, and does not present significant hemolytic activity.

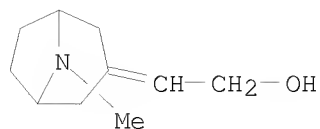
IT 380601-96-7P 1011461-49-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of alkyl ammonium toluene sulfonates in the preparation and antileishmanial activity of cycloalkylidene- or alkyl-substituted ether phospholipid ammonium salts)

RN 380601-96-7 CAPLUS

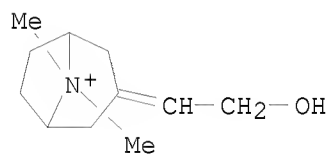
CN Ethanol, 2-(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)- (CA INDEX NAME)



RN 1011461-49-6 CAPLUS  
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 4-methylbenzenesulfonate (1:1) (CA INDEX NAME)

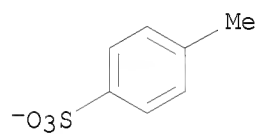
CM 1

CRN 1011461-48-5  
 CMF C11 H20 N O



CM 2

CRN 16722-51-3  
 CMF C7 H7 O3 S



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2006:978901 CAPLUS  
 DOCUMENT NUMBER: 145:348596  
 TITLE: Combination of a steroid sulfatase inhibitor and an  
 ascomycin for the treatment of inflammatory disorders  
 INVENTOR(S): Meingassner, Josef, Gottfried  
 PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH  
 SOURCE: PCT Int. Appl., 104pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO.  | DATE       |
|------------------------|--|----------|------------------|------------|
| WO 2006097293          | A2   | 20060921 | WO 2006-EP2383   | 20060315   |
| WO 2006097293          | A3   | 20061221 |                  |            |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                  |            |
| RW:                    | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM   |          |                  |            |
| AU 2006224797          | A1   | 20060921 | AU 2006-224797   | 20060315   |
| CA 2600329             | A1   | 20060921 | CA 2006-2600329  | 20060315   |
| EP 1861099             | A2   | 20071205 | EP 2006-723452   | 20060315   |
| R:                     | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR   |          |                  |            |
| JP 2008533080          | T  | 20080821 | JP 2008-501224   | 20060315   |
| IN 2007DN06446         | A  | 20070831 | IN 2007-DN6446   | 20070820   |
| CN 101137374           | A  | 20080305 | CN 2006-80007968 | 20070912   |
| MX 200711434           | A  | 20071012 | MX 2007-11434    | 20070914   |
| KR 2007112183          | A  | 20071122 | KR 2007-721074   | 20070914   |
| PRIORITY APPLN. INFO.: |  |          | GB 2005-5539     | A 20050317 |
|                        |  |          | WO 2006-EP2383   | W 20060315 |

AB A combination of a steroid sulfatase inhibitor and an ascomycin is prepred for the treatment of inflammatory disorders. Thus, 6.1 mL of a 50% propanephosphoric acid anhydride solution in DMF, 633 mg of N,N-dimethylaminopyridine in 50 mL of dimethylamine and 1.8 mL of diisopropylethylamine were added to a solution of 1.5 g of 8-aza-bicyclo[4.3.1]decane-8,10-dicarboxylic acid 8-tert-Bu ester, and 2.3 g of 3,5-bis(trifluoromethyl)phenylsulfonamide, the mixture obtained was stirred at 40° and diluted with EtAc. The mixture was distilled and the residue obtained was purified to obtain 10-(3,5-Bis-trifluoromethylbenzenesulfonylamino-carbonyl)-8-aza-bicyclo[4.3.1]decane-8-carboxylic acid tert-Bu ester in the form of a sodium salt which was treated with HCl to obtain the ester form (I). Efficacy of a combination of I and ascomycin in the treatment of skin inflammation in mice is shown.

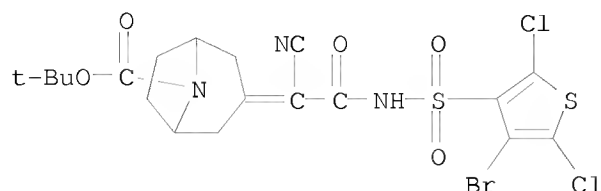
IT 512821-16-8P 512821-27-1P 512821-29-3P  
 512821-30-6P 512821-31-7P 512821-32-8P  
 512821-33-9P 512821-34-0P 512821-35-1P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)



(combination of steroid sulfatase inhibitor and ascomycin for treatment of inflammatory disorders)

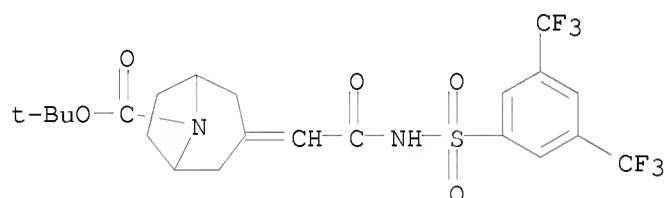
RN 512821-16-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
3-[2-[[[4-bromo-2,5-dichloro-3-thienyl)sulfonyl]amino]-1-cyano-2-oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



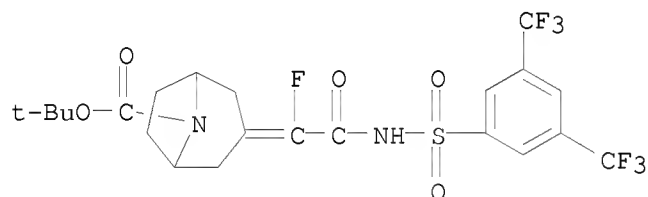
RN 512821-27-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
3-[2-[[[3,5-bis(trifluoromethyl)phenyl)sulfonyl]amino]-2-oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



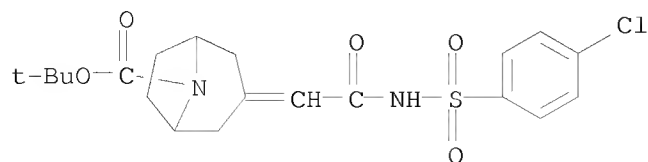
RN 512821-29-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
3-[2-[[[3,5-bis(trifluoromethyl)phenyl)sulfonyl]amino]-1-fluoro-2-oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



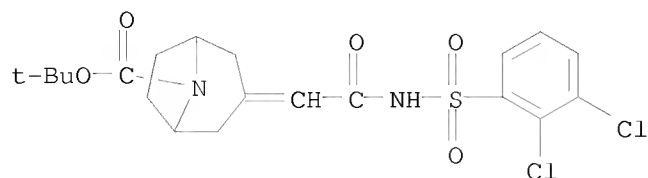
RN 512821-30-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
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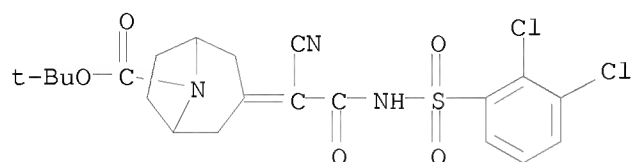


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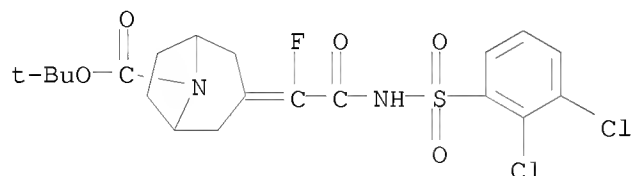
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1,1-dimethylethyl ester (CA INDEX NAME)



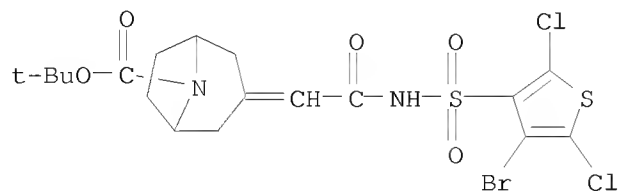
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1,1-dimethylethyl ester (CA INDEX NAME)



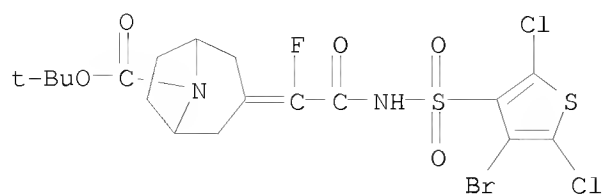
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1,1-dimethylethyl ester (CA INDEX NAME)



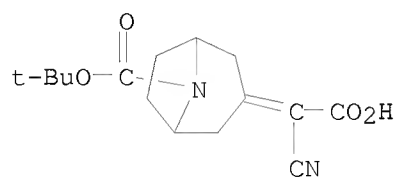
RN 512821-34-0 CAPLUS  
CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
3-[2-[[[(4-bromo-2,5-dichloro-3-thienyl)sulfonyl]amino]-2-oxoethylidene]-,  
1,1-dimethylethyl ester (CA INDEX NAME)



RN 512821-35-1 CAPLUS  
CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
3-[2-[[[(4-bromo-2,5-dichloro-3-thienyl)sulfonyl]amino]-1-fluoro-2-oxoethylidene]-,  
1,1-dimethylethyl ester (CA INDEX NAME)



IT 512822-38-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (combination of steroid sulfatase inhibitor and ascomycin for treatment  
 of inflammatory disorders)  
 RN 512822-38-7 CAPLUS  
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-(carboxycyanomethylene)-,  
 8-(1,1-dimethylethyl) ester (CA INDEX NAME)



L3 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:976823 CAPLUS

DOCUMENT NUMBER: 145:356656

TITLE: Preparation of (hetero)arylsulfonamides as steroid sulfatase inhibitors for treatment of inflammatory diseases

INVENTOR(S): Meingassner, Josef Gottfried

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 104pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

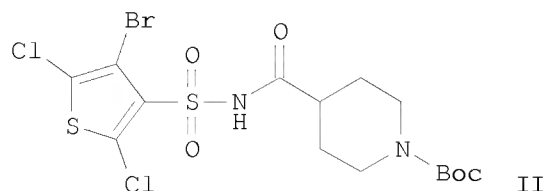
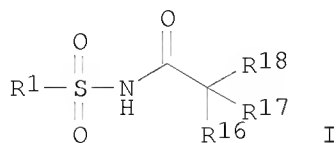
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO.  | DATE       |
|------------------------|--|----------|------------------|------------|
| WO 2006097292          | A1   | 20060921 | WO 2006-EP2382   | 20060315   |
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| RW:                    | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM   |          |                  |            |
| AU 2006224796          | A1   | 20060921 | AU 2006-224796   | 20060315   |
| CA 2599470             | A1   | 20060921 | CA 2006-2599470  | 20060315   |
| EP 1861098             | A1   | 20071205 | EP 2006-707567   | 20060315   |
| R:                     | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR   |          |                  |            |
| JP 2008533079          | T  | 20080821 | JP 2008-501223   | 20060315   |
| IN 2007DN06443         | A  | 20070831 | IN 2007-DN6443   | 20070820   |
| CN 101137375           | A  | 20080305 | CN 2006-80008024 | 20070912   |
| MX 200711320           | A  | 20071108 | MX 2007-11320    | 20070914   |
| KR 2007113226          | A  | 20071128 | KR 2007-721073   | 20070914   |
| PRIORITY APPLN. INFO.: |  |          | GB 2005-5541     | A 20050317 |
|                        |  |          | WO 2006-EP2382   | W 20060315 |

GI

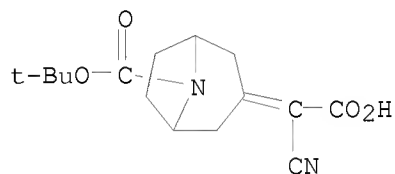


AB Title compds. represented by the formula I [wherein R1 = haloalkyl, (un)substituted alkenyl, Ph, thienyl, etc.; R16 = H, R17R18 = (un)substituted piperidiny1, cycloalkyl, bridged cycloalkyl, etc.] were prepared as steroid sulfatase inhibitors. For example, II was provided in a multi-step synthesis starting from 4-bromo-2,5-dichlorothiophene-3-sulfonyl chloride. I showed activity in human steroid sulfatase assay (IC50 = 0.0046 ~ 10), in CHO/STS assay (IC50 = 0.05 ~ 10) and in human skin homogenate (IC50 = 0.03 ~ 10  $\mu$ M). The use of a steroid sulfatase inhibitor in the preparation of a medicament for the treatment of inflammatory diseases.

IT 512822-38-7P, 3-(Carboxy-1-cyanomethylene)-8-azabicyclo[3.2.1]octane-8-carboxylic acid tert-butyl ester  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of (hetero)arylsulfonamide derivs. as steroid sulfatase inhibitors for treatment of inflammatory diseases)

RN 512822-38-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-(carboxycyanomethylene)-, 8-(1,1-dimethylethyl) ester (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1026605 CAPLUS

DOCUMENT NUMBER: 143:326374

TITLE: Preparation of tetrahydroquinoline analogs such as benzoxazinones as muscarinic agonists useful against mental and other disorders

INVENTOR(S): Skjaerbaek, Niels; Koch, Kristian Norup; Friberg, Bo Lennart Mikael; Tolf, Bo-Ragnar

PATENT ASSIGNEE(S): Den.

SOURCE: U.S. Pat. Appl. Publ., 74 pp., Cont.-in-part of U.S. Ser. No. 329,455.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

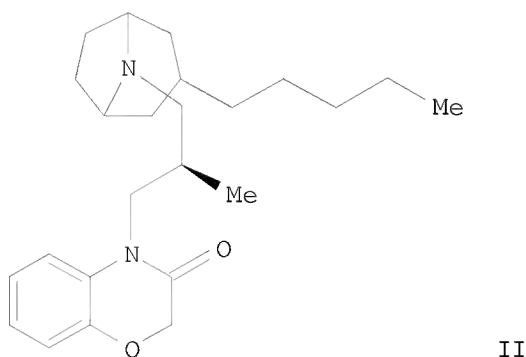
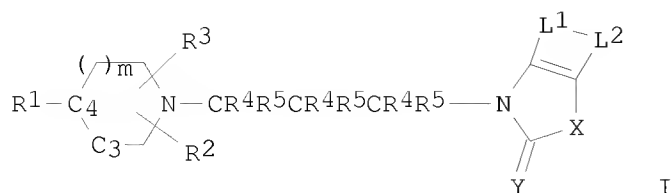
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO.  | DATE        |
|------------------------|--|----------|------------------|-------------|
| US 20050209226         | A1   | 20050922 | US 2004-19556    | 20041221    |
| US 20030176418         | A1   | 20030918 | US 2002-329455   | 20021223    |
| US 7307075             | B2   | 20071211 |                  |             |
| AU 2005319426          | A2   | 20060629 | AU 2005-319426   | 20051215    |
| AU 2005319426          | A1   | 20060629 |                  |             |
| CA 2591766             | A1   | 20060629 | CA 2005-2591766  | 20051215    |
| WO 2006068904          | A1   | 20060629 | WO 2005-US45313  | 20051215    |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                  |             |
| RW:                    | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM   |          |                  |             |
| EP 1828176             | A1   | 20070905 | EP 2005-854098   | 20051215    |
| R:                     | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR   |          |                  |             |
| JP 2008524328          | T  | 20080710 | JP 2007-548300   | 20051215    |
| US 20060199813         | A1   | 20060907 | US 2006-417865   | 20060503    |
| US 20060199810         | A1   | 20060907 | US 2006-417867   | 20060503    |
| MX 200707588           | A  | 20070808 | MX 2007-7588     | 20070621    |
| NO 2007003183          | A  | 20070917 | NO 2007-3183     | 20070621    |
| IN 2007MN01046         | A  | 20070817 | IN 2007-MN1046   | 20070712    |
| KR 2007090003          | A  | 20070904 | KR 2007-715954   | 20070712    |
| CN 101124222           | A  | 20080213 | CN 2005-80048487 | 20070820    |
| PRIORITY APPLN. INFO.: |  |          | US 2001-344722P  | P 20011228  |
|                        |  |          | US 2002-329455   | A2 20021223 |
|                        |  |          | US 2004-19556    | A 20041221  |
|                        |  |          | WO 2005-US45313  | W 20051215  |

OTHER SOURCE(S): MARPAT 143:326374

GI



AB The present invention relates to tetrahydroquinoline compds. (shown as I; variables defined below; e.g. II) as muscarinic receptor agonists (especially the M1 and M4 subtypes); compns. comprising the same; methods of inhibiting an activity of a muscarinic receptor with said compds.; methods of treating a disease condition associated with a muscarinic receptor using said compds.; and methods for identifying a subject suitable for treatment using said compds. Some of the compds. of the invention also exhibit functional dopamine antagonism. Values for %efficacy and pEC50 are tabulated for about 25 examples of I for M1-M5 muscarinic receptors showing selectivity towards M1 and M4 subtypes. For I: R1 = (un)substituted C1-6-alkyl, C2-6-alkylidene, C2-6-alkenyl, C2-6-alkynyl, O-C1-6-alkyl, O-C2-6-alkenyl, O-C2-6-alkynyl, S-C1-6-alkyl, S-C2-6-alkenyl, or S-C2-6-alkynyl; m = 0-2; C3-C4 is CH2-CH or CH=C or C4 is CH and C3 is absent; R2 and R3 = H, (un)substituted C1-6 alkyl, (un)substituted O-C1-6 alkyl, halogen, hydroxy or selected such that R2 and R3 together form a ring system; each R4 and R5 = H, halogen, hydroxy, (un)substituted C1-6-alkyl, (un)substituted O-C1-6-alkyl, (un)substituted aryl-C1-6alkyl, and (un)substituted arylheteroalkyl. L1 and L2 are biradicals independently = -C(R6):C(R7), -C(R6):N-, -N:C(R6)-, -S-, -NH- and -O-; wherein only one of L1 and L2 may be -S-, -NH- and -O-; Y = O, S, and H2; X is a biradical = -C(R6)(R7)-C(R6)(R7)-, -C(R6):C(R7)-, -OC(R6)(R7)-, C(R6)(R7)O-, -SC(R6)(R7)-, -C(R6)(R7)S-, -N(RN)C(R6)(R7)-, -C(R6)(R7)N(RN)-, -C(R6)(R7)C(R6)(R7)C(R6)(R7)-, -O-C(R6)(R7)C(R6)(R7)-, SC(R6)(R7)C(R6)(R7)-, N(RN)C(R6)(R7)C(R6)(R7)-, -C(R6)(R7)C(R6)(R7)O-, -C(R6)(R7)C(R6)(R7)S-, -C(R6)(R7)-C(R6)(R7)-N(RN)-, -C(R6)(R7)C(R6):C(R7)-, and -C(R6):C(R7)C(R6)(R7), wherein R6 and R7 = H, halogen, hydroxy, nitro, cyano, NRNRN, N(RN)C(O)N(RN), (un)substituted C1-6-alkyl, C2-6-alkenyl, C2-6-alkynyl, (un)substituted OC1-6-alkyl, (un)substituted O-aryl, (un)substituted O-C2-6-alkenyl, (un)substituted OC2-6-alkynyl wherein RN = H, and (un)substituted C1-6-alkyl. Although the methods of preparation are not claimed, many example preps. of intermediates and I are included.

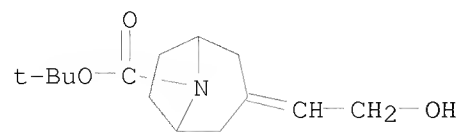
IT 257628-74-3P, 3-(2-Hydroxyethylidene)-8-azabicyclo[3.2.1]octane-8-carboxylic acid tert-butyl ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tetrahydroquinoline analogs such as benzoxazinones as muscarinic agonists useful against mental and other disorders)

RN 257628-74-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-(2-hydroxyethylidene)-,  
1,1-dimethylethyl ester (CA INDEX NAME)





L3 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:369242 CAPLUS  
DOCUMENT NUMBER: 142:423890  
TITLE: 8-Methyl-8-aza-bicyclo[3.2.1]octane derivative  
muscarinic acetylcholine receptor antagonists, their  
preparation, and their therapeutic use  
INVENTOR(S): Palovich, Michael R.; Wan, Zehong; Zhu, Chongjie  
PATENT ASSIGNEE(S): Glaxo Group Limited, UK  
SOURCE: PCT Int. Appl., 15 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO.  | DATE       |
|------------------------|--|----------|------------------|------------|
| WO 2005037224          | A2   | 20050428 | WO 2004-US34234  | 20041015   |
| WO 2005037224          | A3   | 20050623 |                  |            |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                  |            |
| RW:                    | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                  |            |
| AU 2004281167          | A1   | 20050428 | AU 2004-281167   | 20041015   |
| CA 2542636             | A1   | 20050428 | CA 2004-2542636  | 20041015   |
| EP 1677796             | A2   | 20060712 | EP 2004-795406   | 20041015   |
| R:                     | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR   |          |                  |            |
| BR 2004015281          | A  | 20061219 | BR 2004-15281    | 20041015   |
| CN 1897947             | A  | 20070117 | CN 2004-80038046 | 20041015   |
| JP 2007509061          | T  | 20070412 | JP 2006-535384   | 20041015   |
| IN 2006DN01989         | A  | 20070803 | IN 2006-DN1989   | 20060412   |
| US 20070135478         | A1   | 20070614 | US 2006-575837   | 20060413   |
| KR 2007017965          | A  | 20070213 | KR 2006-707165   | 20060414   |
| MX 2006PA04242         | A  | 20060628 | MX 2006-PA4242   | 20060417   |
| NO 2006002071          | A  | 20060508 | NO 2006-2071     | 20060508   |
| PRIORITY APPLN. INFO.: |  |          | US 2003-512161P  | P 20031017 |
|                        |  |          | WO 2004-US34234  | W 20041015 |

OTHER SOURCE(S): MARPAT 142:423890

AB 8-Methyl-8-aza-bicyclo[3.2.1]octane derivative muscarinic acetylcholine receptor antagonists are provided. Compound preparation is included. The compds. of the invention may be used to treat muscarinic acetylcholine receptor-mediated diseases.

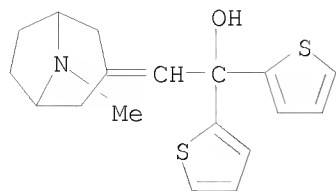
IT 850607-46-4P 850607-47-5P 850607-48-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(azabicyclooctane derivative muscarinic acetylcholine receptor antagonists, preparation, and therapeutic use)

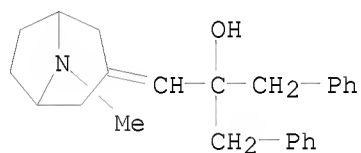
RN 850607-46-4 CAPLUS

CN 2-Thiophenemethanol,  $\alpha$ -[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- $\alpha$ -2-thienyl- (CA INDEX NAME)



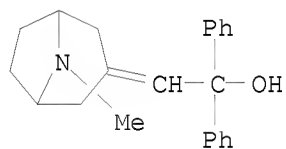
RN 850607-47-5 CAPLUS

CN Benzeneethanol,  $\alpha$ -[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- $\alpha$ -(phenylmethyl)- (CA INDEX NAME)



RN 850607-48-6 CAPLUS

CN Benzenemethanol,  $\alpha$ -[(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)methyl]- $\alpha$ -phenyl- (CA INDEX NAME)



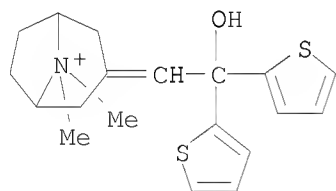
IT 850607-49-7P 850607-50-0P 850607-51-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(azabicyclooctane derivative muscarinic acetylcholine receptor antagonists, preparation, and therapeutic use)

RN 850607-49-7 CAPLUS

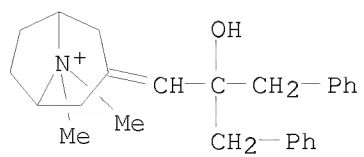
CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-hydroxy-2,2-di-2-thienylethylidene)-8,8-dimethyl-, iodide (1:1) (CA INDEX NAME)



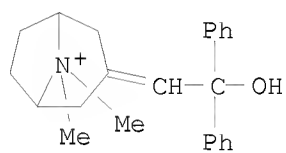
● I<sup>-</sup>

RN 850607-50-0 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-[2-hydroxy-3-phenyl-2-(phenylmethyl)propylidene]-8,8-dimethyl-, iodide (1:1) (CA INDEX NAME)

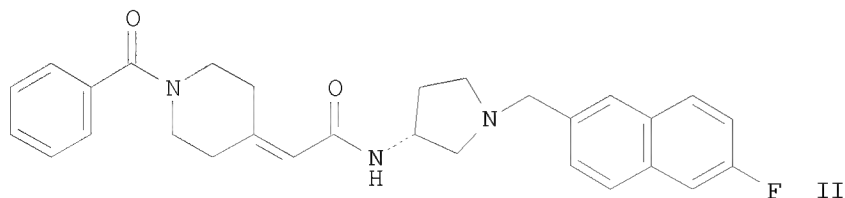
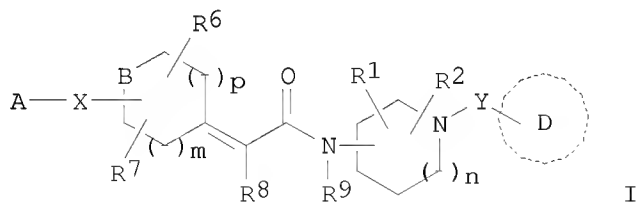


RN 850607-51-1 CAPLUS  
 CN 8-Azoniabicyclo[3.2.1]octane, 3-(2-hydroxy-2,2-diphenylethylidene)-8,8-dimethyl-, iodide (1:1) (CA INDEX NAME)



ACCESSION NUMBER: 2004:220312 CAPLUS  
 DOCUMENT NUMBER: 140:270742  
 TITLE: Preparation of (N-pyrrolidinyl)acrylamide derivatives as CCR3 antagonists for treatment of asthma  
 INVENTOR(S): Morihira, Koichiro; Kubota, Hirokazu; Sato, Ippei; Yokoyama, Kazuhiro; Morokata, Tatsuaki; Yokota, Masaki; Imaoka, Takayuki; Kaneko, Masayuki; Funahashi, Miyuki; Kaneeda, Masanobu  
 PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan; Toray Industries, Inc.  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.   | DATE       |
|---|------|----------|-------------------|------------|
| WO 2004022535   | A1   | 20040318 | WO 2003-JP10845   | 20030827   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW<br>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |      |          |                   |            |
| JP 2004083511   | A    | 20040318 | JP 2002-248660    | 20020828   |
| JP 2006076884   | A    | 20060323 | JP 2003-91009     | 20030328   |
| AU 2003261756   | A1   | 20040329 | AU 2003-261756    | 20030827   |
| PRIORITY APPLN. INFO.:  |      |          | JP 2002-248660    | A 20020828 |
|   |      |          | JP 2003-91009     | A 20030328 |
|   |      |          | WO 2003-JP10845   | W 20030827 |
| OTHER SOURCE(S):  |      |          | MARPAT 140:270742 |            |
| GI  |      |          |                   |            |



AB The title acrylamide derivs. with general formula of I [wherein B = O, S,

SO, SO<sub>2</sub>, (un)substituted CH<sub>2</sub>, or NH; A = H, (un)substituted hydrocarbonyl, or heterocyclyl; X = a single bond, alkenylene, alkynylene, O, S, SO, SO<sub>2</sub>, CO, CO<sub>2</sub>, (un)substituted NH, CONH, NHCO, etc.; R<sub>6</sub> and R<sub>7</sub> = independently H, halo, CN, CONH<sub>2</sub>, CO<sub>2</sub>H, (un)substituted OH, etc.; p = 0-2; m = 0-2; n = 0-2; Y = oxo, (un)substituted alkylene, or alkenylene; R<sub>8</sub> = H, halo, or (un)substituted alkyl; R<sub>9</sub> = H or alkyl; R<sub>1</sub> and R<sub>2</sub> = independently H, halo, CN, CONH<sub>2</sub>, CO<sub>2</sub>H, (un)substituted OH, etc.; ring D = (un)substituted aryl, heterocyclyl, cycloalkyl, etc.] or pharmaceutically acceptable salts thereof are prepared as chemokine receptor (CCR) 3 antagonists. For example, the compound II was prepared in a multi-step synthesis. Some of compds. I showed inhibitory activity with IC<sub>50</sub> of <10 μM against human CCR3 in vitro. I are efficacious in treating diseases in which CCR3 participates, for example, asthma (no data).

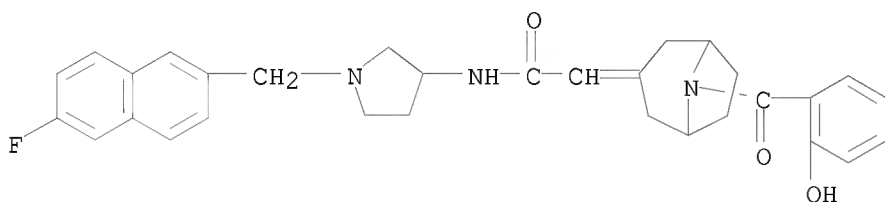
IT 672957-66-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of (N-pyrrolidinyl)acrylamide derivs. as CCR3 antagonists for treatment of asthma)

RN 672957-66-3 CAPLUS

CN Acetamide, N-[1-[(6-fluoro-2-naphthalenyl)methyl]-3-pyrrolidinyl]-2-[8-(2-hydroxybenzoyl)-8-azabicyclo[3.2.1]oct-3-ylidene]- (CA INDEX NAME)



IT 672957-80-1P 672957-82-3P

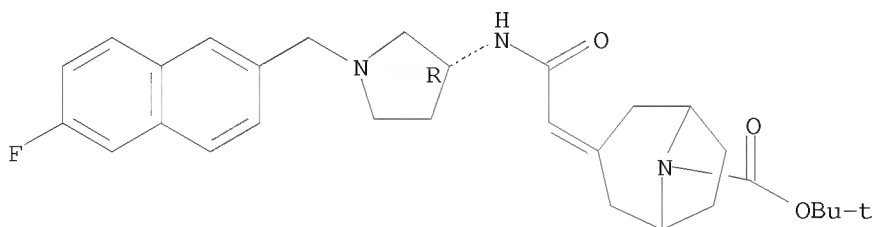
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of (N-pyrrolidinyl)acrylamide derivs. as CCR3 antagonists for treatment of asthma)

RN 672957-80-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[2-[[[(3R)-1-[(6-fluoro-2-naphthalenyl)methyl]-3-pyrrolidinyl]amino]-2-oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)

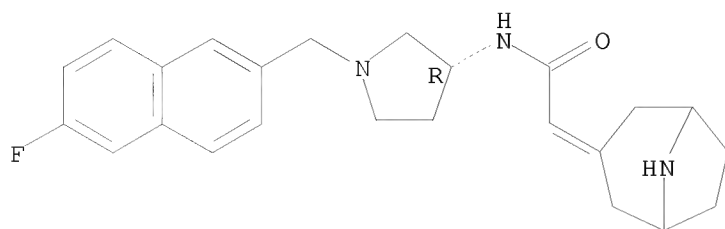
Absolute stereochemistry.



RN 672957-82-3 CAPLUS

CN Acetamide, 2-(8-azabicyclo[3.2.1]oct-3-ylidene)-N-[(3R)-1-[(6-fluoro-2-naphthalenyl)methyl]-3-pyrrolidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:301040 CAPLUS  
DOCUMENT NUMBER: 138:321135  
TITLE: Preparation of N-(piperidin-4-ylcarbonyl)  
acylsulfonamides as inhibitors of steroid sulfatase  
INVENTOR(S): Horvath, Amarylla; Lehr, Philipp; Nussbaumer, Peter;  
Schreiner, Erwin Paul  
PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma G.m.b.H.  
SOURCE: PCT Int. Appl., 126 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| WO 2003031397   | A1   | 20030417 | WO 2002-EP11140 | 20021004   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW |      |          |                 |            |
| RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR  |      |          |                 |            |
| CA 2458453  | A1   | 20030417 | CA 2002-2458453 | 20021004   |
| AU 2002350490   | A1   | 20030422 | AU 2002-350490  | 20021004   |
| AU 2002350490   | B2   | 20060727 |                 |            |
| EP 1436253  | A1   | 20040714 | EP 2002-785159  | 20021004   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK   |      |          |                 |            |
| BR 2002013131   | A    | 20040921 | BR 2002-13131   | 20021004   |
| HU 2004001687   | A2   | 20041129 | HU 2004-1687    | 20021004   |
| HU 2004001687   | A3   | 20080630 |                 |            |
| CN 1564811  | A    | 20050112 | CN 2002-819757  | 20021004   |
| JP 2005504843   | T    | 20050217 | JP 2003-534381  | 20021004   |
| NZ 532072   | A    | 20070223 | NZ 2002-532072  | 20021004   |
| RU 2320643  | C2   | 20080327 | RU 2004-114244  | 20021004   |
| ZA 2004001301   | A    | 20041119 | ZA 2004-1301    | 20040218   |
| NO 2004000960   | A    | 20040305 | NO 2004-960     | 20040305   |
| MX 2004PA03236  | A    | 20040723 | MX 2004-PA3236  | 20040405   |
| IN 2004CN00702  | A    | 20060113 | IN 2004-CN702   | 20040405   |
| US 20050059712  | A1   | 20050317 | US 2004-490464  | 20041001   |
| PRIORITY APPLN. INFO.:  |      |          | GB 2001-24027   | A 20011005 |
|   |      |          | GB 2001-24028   | A 20011005 |
|   |      |          | GB 2001-24839   | A 20011016 |
|   |      |          | GB 2001-27173   | A 20011112 |
|   |      |          | GB 2001-27174   | A 20011112 |
|   |      |          | GB 2001-27343   | A 20011114 |
|   |      |          | GB 2002-11524   | A 20020520 |
|   |      |          | WO 2002-EP11140 | W 20021004 |

OTHER SOURCE(S): MARPAT 138:321135

AB The title compds. with general formula of R1-(CH2)m-SO2NHCO-(CH2)n-R2 [wherein R1 = haloalkyl, (un)substituted alkenyl, thienyl, Py, benzothiazolyl, chromanyl, or aryl; R2 = (un)substituted alkenyl, alkyl, cyclyl, bicycyl, or tricycyl, etc.; m and n = independently 0-4; with exclusions] are prepared as inhibitors of steroid sulfatase. For example, 4-bromo-2,5-dichlorothiophene-3-sulfonyl chloride was treated with aqueous NH3 in AcOEt to give 4-bromo-2,5-dichlorothiophene-3-sulfonamide. The sulfonamide was reacted with 1-(tert-butoxycarbonyl)piperidine-4-carboxylic acid in DMF in the presence of DMAP, DIEA, and EDC to afford 4-(4-bromo-2,5-dichlorothiophene-3-sulfonylaminocarbonyl)piperidine-1-

carboxylic acid tert-Bu ester. The invention compds. showed IC50 of 0.0046 to 0.29  $\mu$ M against human steroid sulfatase.

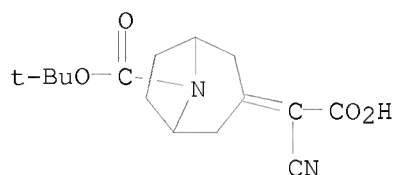
IT 512822-38-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of N-(piperidinylcarbonyl) acylsulfonamides as inhibitors of steroid sulfatase)

RN 512822-38-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-(carboxycyanomethylene)-, 8-(1,1-dimethylethyl) ester (CA INDEX NAME)



IT 512821-16-8P 512821-27-1P 512821-29-3P

512821-30-6P 512821-31-7P 512821-32-8P

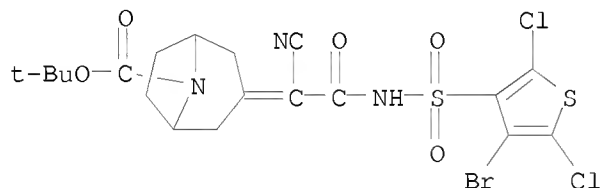
512821-33-9P 512821-34-0P 512821-35-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(steroid sulfatase inhibitor; preparation of N-(piperidinylcarbonyl) acylsulfonamides as inhibitors of steroid sulfatase)

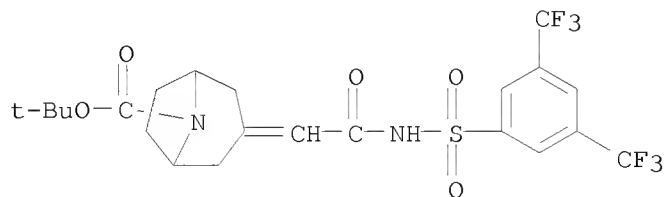
RN 512821-16-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[2-[[[4-bromo-2,5-dichloro-3-thienyl)sulfonyl]amino]-1-cyano-2-oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 512821-27-1 CAPLUS

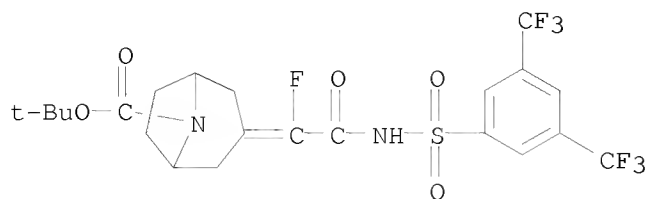
CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[2-[[[3,5-bis(trifluoromethyl)phenyl)sulfonyl]amino]-2-oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



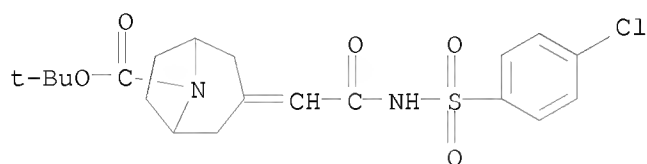
RN 512821-29-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[2-[[[3,5-bis(trifluoromethyl)phenyl)sulfonyl]amino]-1-fluoro-2-oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)

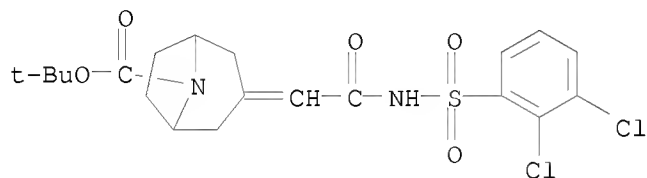




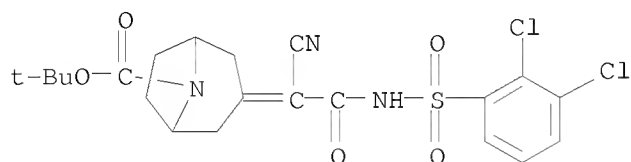
RN 512821-30-6 CAPLUS  
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
 3-[2-[[[4-(trifluoromethyl)phenyl]sulfonyl]amino]-2-oxoethylidene]-,  
 1,1-dimethylethyl ester (CA INDEX NAME)



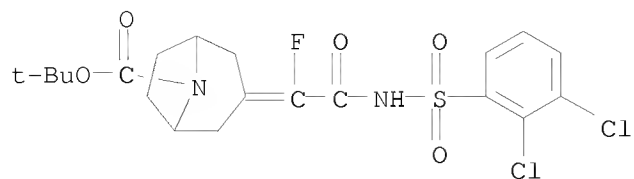
RN 512821-31-7 CAPLUS  
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
 3-[2-[[[2,3-dichlorophenyl]sulfonyl]amino]-2-oxoethylidene]-,  
 1,1-dimethylethyl ester (CA INDEX NAME)



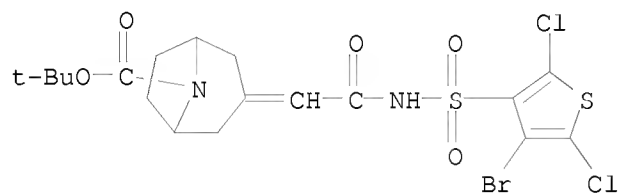
RN 512821-32-8 CAPLUS  
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
 3-[1-cyano-2-[[[2,3-dichlorophenyl]sulfonyl]amino]-2-oxoethylidene]-,  
 1,1-dimethylethyl ester (CA INDEX NAME)



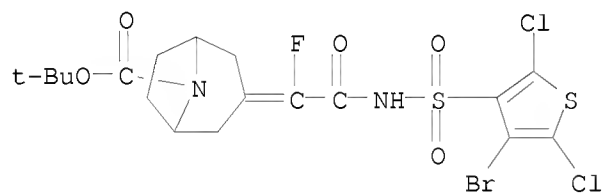
RN 512821-33-9 CAPLUS  
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
 3-[2-[[[2,3-dichlorophenyl]sulfonyl]amino]-1-fluoro-2-oxoethylidene]-,  
 1,1-dimethylethyl ester (CA INDEX NAME)



RN 512821-34-0 CAPLUS  
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
 3-[2-[[[4-bromo-2,5-dichloro-3-thienyl)sulfonyl]amino]-2-oxoethylidene]-,  
 1,1-dimethylethyl ester (CA INDEX NAME)



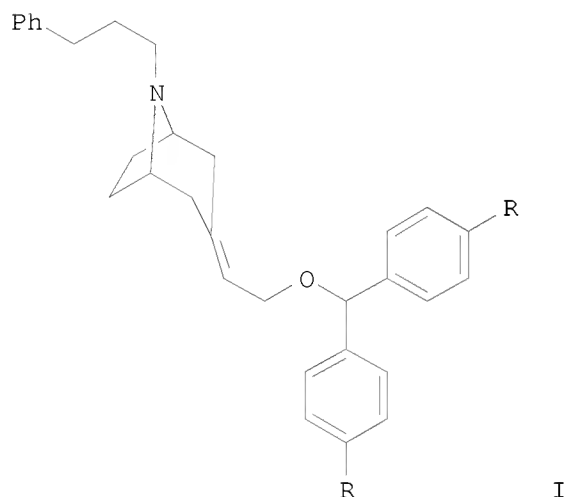
RN 512821-35-1 CAPLUS  
 CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
 3-[2-[[[4-bromo-2,5-dichloro-3-thienyl)sulfonyl]amino]-1-fluoro-2-  
 oxoethylidene]-, 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:189370 CAPLUS  
DOCUMENT NUMBER: 139:52839  
TITLE: Synthesis of dopamine transporter selective  
3-{2-(Diarylmethoxyethylidene))-8-alkylaryl-8-  
azabicyclo[3.2.1]octanes  
AUTHOR(S): Bradley, Amy L.; Izenwasser, Sari; Wade, Dean;  
Cararas, Shaine; Trudell, Mark L.  
CORPORATE SOURCE: Department of Chemistry, University of New Orleans,  
New Orleans, LA, 70148, USA  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003),  
13(4), 629-632  
CODEN: BMCLE8; ISSN: 0960-894X  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 139:52839  
GI



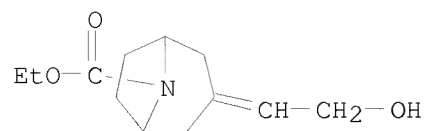
AB A series of 3-{2-(diarylmethoxyethylidene))-8-alkylaryl-8-azabicyclo[3.2.1]octanes was synthesized and the binding affinities of the compds. were determined at the dopamine and serotonin transporters. The 8-phenylpropyl analogs I [R = H ( $K_i$ =4.1 nM); R = F ( $K_i$ =3.7 nM)] were the most potent compds. of the series with binding affinities 3 times greater than GBR-12909. In addition, I (R = H; SERT/DAT=327) was over 300-fold more selective for the dopamine transporter than the serotonin transporter.

IT 548458-83-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of Et (hydroxyethylidene)azabicyclooctanecarbamate via demethylation/carbonylation of tropinone with Et chloroformate followed by olefination with di-Me (methoxycarbonyl)methylphosphonate, and reduction)

RN 548458-83-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-(2-hydroxyethylidene)-, ethyl ester (CA INDEX NAME)



REFERENCE COUNT:

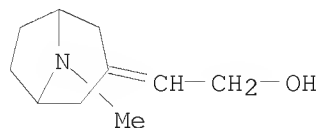
24

THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2001:749720 CAPLUS  
 DOCUMENT NUMBER: 136:37802  
 TITLE: Synthesis and biological evaluation of tropane-like  
 1-{2-[bis(4-fluorophenyl)methoxy]ethyl}-4-(3-  
 phenylpropyl)piperazine (GBR 12909) analogs  
 AUTHOR(S): Zhang, Ying; Joseph, David B.; Bowen, Wayne D.;  
 Flippen-Anderson, Judith L.; Dersch, Christina M.;  
 Rothman, Richard B.; Jacobson, Arthur E.; Rice, Kenner  
 C.  
 CORPORATE SOURCE: Laboratory of Medicinal Chemistry National Institute  
 of Diabetes and Digestive and Kidney Diseases,  
 National Institutes of Health, Bethesda, MD,  
 20892-0815, USA  
 SOURCE: Journal of Medicinal Chemistry (2001), 44(23),  
 3937-3945  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 136:37802

AB The authors have prepared azabicyclo[3.2.1] derivs. (C-3-substituted  
 tropanes) that bind with high affinity to the dopamine transporter and  
 inhibit dopamine reuptake. Within the series,  
 3-{2-[bis-(4-fluorophenyl)methoxy]ethylidene}-8-methyl-8-  
 azabicyclo[3.2.1]octane (I) was found to have the highest affinity and  
 selectivity for the dopamine transporter. These azabicyclo[3.2.1]  
 (bridged piperidine) series of compds. differ from the well-known  
 benzotropines by a 2-carbon spacer between C-3 and a diarylmethoxy moiety.  
 Interestingly, these new compds. demonstrated a much lower affinity for  
 the muscarinic-1 site, at least a 100-fold decrease compared to  
 benztropine. Interestingly, these new compds. demonstrated a much lower  
 affinity for the muscarinic-1 site, at least a 100-fold decrease compared  
 to benztropine. Replacing N-Me with N-phenylpropyl in two of the compds.  
 resulted in a 3-10-fold increase in binding affinity for the dopamine  
 transporter. However, those compds. lost selectivity for the dopamine  
 transporter over the serotonin transporter. Replacement of the ether  
 oxygen in the diarylmethoxy moiety with a nitrogen atom gave relatively  
 inactive amines, indicating the important role which is played by the  
 ether oxygen in transporter binding. Reduction of the C-3 double bond in I  
 gave 3 $\alpha$ -substituted tropanes, as shown by X-ray crystallog.  
 analyses. The 3 $\alpha$ -substituted tropanes had lower affinity and less  
 selectivity than the comparable unsatd. ligands.

IT 380601-96-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation, muscarinic M1 receptor, dopamine and serotonin transporter  
 affinity, and structure-activity relationship of azabicyclooctane  
 derivs. as GBR 12909 analogs)  
 RN 380601-96-7 CAPLUS  
 CN Ethanol, 2-(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)- (CA INDEX NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



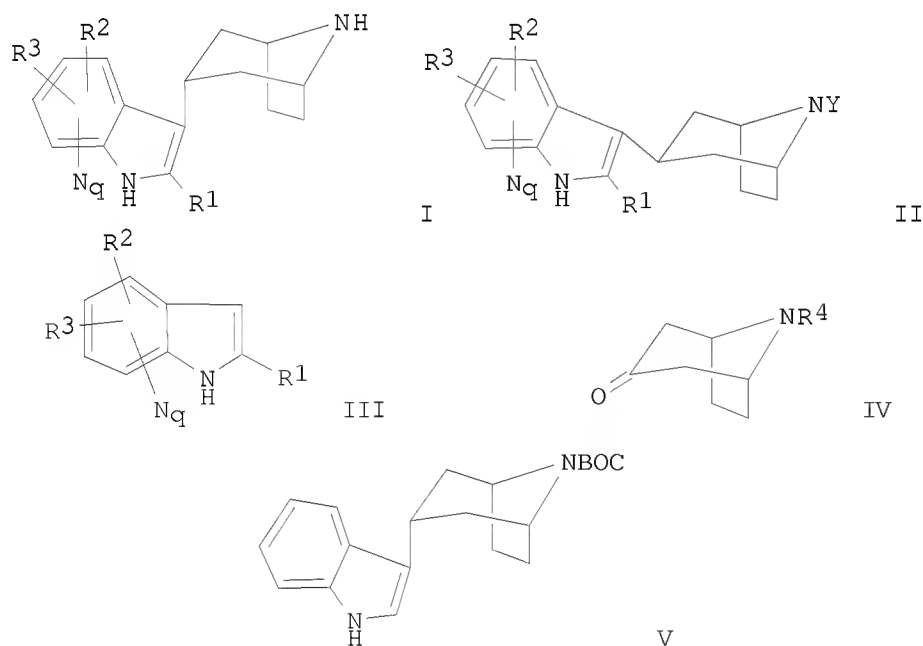
ACCESSION NUMBER: 2001:152680 CAPLUS  
 DOCUMENT NUMBER: 134:208001  
 TITLE: Process for preparation of indolyltropane derivatives  
 INVENTOR(S): Forbes, Ian Thomson  
 PATENT ASSIGNEE(S): Smithkline Beecham P.L.C., UK  
 SOURCE: PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| WO 2001014374 | A2   | 20010301 | WO 2000-EP7697  | 20000808 |
| WO 2001014374 | A3   | 20011011 |                 |          |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 1999-19843 A 19990820

OTHER SOURCE(S): CASREACT 134:208001; MARPAT 134:208001  
 GI



AB A process is described for the stereoselective preparation of exo- and endo-indolyltropanes I and II (R1 = H or (C1-6)alkyl; R2 and R3 may be the same or different, are selected from H, halo, cyano, (C1-6)alkyl,

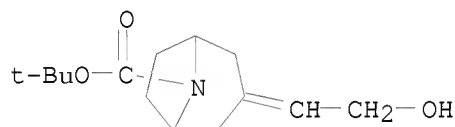
(C3-7)cycloalkyl, (C1-6)alkoxy, halo(C1-6)alkyl, hydroxy, oxo, amino, mono- or di-(C1-6)alkylamino, acylamino, nitro, carboxy, (C1-6)alkoxycarbonyl, (C1-6)alkenyloxycarbonyl, (C1-6)alkoxycarbonyl(C1-6)alkyl, carboxy(C1-6)alkyl, (C1-6)alkylcarbonyloxy, carboxy(C1-6)alkyloxy, (C1-6)alkoxycarbonyl(C1-6)alkoxy, (C1-6)alkylthio, (C1-6)alkylsulfinyl, (C1-6)alkylsulfonyl, sulfamoyl, mono- and di-(C1-6)-alkylsulfamoyl, carbamoyl, mono- and di-(C1-6)alkylcarbamoyl, (C1-6)alkylsulfonamido, arylsulfonamido, aryl, aryl(C1-6)alkyl, aryl(C1-6)alkoxy, aryloxy, and heterocyclyl; Y = H, nitrogen protecting group or an organic substituent; and Nq represents optional ring nitrogen atoms in positions 4, 5, 6, and 7; wherein q is 0, 1 or 2) by reaction of the indoles III with tropanes IV (R4 = H, BOC) followed by hydrogenation. Thus, N-(benzyloxycarbonyl)tropanone was condensed with indole in AcOH containing AcOH and the product hydrogenated in EtOH in presence of Pd followed by reaction with di-tert-Bu dicarbonate to give the indolyltropane V.

IT 257628-74-3P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(process for preparation of indolyltropane derivs.)

RN 257628-74-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-(2-hydroxyethylidene)-, 1,1-dimethylethyl ester (CA INDEX NAME)





L3 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:808199 CAPLUS

DOCUMENT NUMBER: 132:152008

TITLE: Highly stereoselective synthesis of exo and endo indolotropanes

AUTHOR(S): Forbes, Ian T.

CORPORATE SOURCE: SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Essex, CM19 5AD, UK

SOURCE: Tetrahedron Letters (1999), 40(52), 9293-9295  
CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:152008

AB Highly stereoselective routes to exo and endo indolotropanes have been developed. This provides a facile route to these bicyclic analogs of the pharmaceutically active indolopiperidine motif.

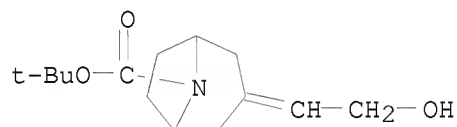
IT 257628-74-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(highly stereoselective synthesis of exo and endo indolotropanes)

RN 257628-74-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-(2-hydroxyethylidene)-, 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT:

8

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

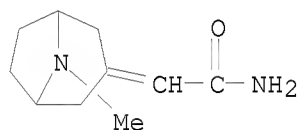
ACCESSION NUMBER: 1998:237743 CAPLUS  
DOCUMENT NUMBER: 129:4602  
ORIGINAL REFERENCE NO.: 129:1109a,1112a  
TITLE: 5-HT3 and 5-HT4 receptor affinities of  
naphtho[1,2-d]thiazole derivatives with various basic  
side chains  
AUTHOR(S): Perrone, Roberto; Berardi, Francesco; Colabufo, Nicola  
A.; Leopoldo, Marcello; Tortorella, Vincenzo  
CORPORATE SOURCE: Dip. Farmaco-Chimico, Bari, 70126, Italy  
SOURCE: Medicinal Chemistry Research (1997), 7(9), 519-529  
CODEN: MCREEB; ISSN: 1054-2523  
PUBLISHER: Birkhaeuser Boston  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Several 2-piperidinyl- and 2-(piperazinyl)alkyl-substituted derivs. of  
8,9-dihydronaphtho[1,2-d]thiazole and some related compds. were prepared and  
studied in serotonin 5-HT3 and 5-HT4 and dopamine D2 receptor binding  
assays. The naphthothiazole group linked to N-methylpiperazine led to a  
good 5-HT3 affinity (IC50=11 nM) and high selectivity vs. 5-HT4 and D2  
receptors (IC50=1360 nM and IC50 > 10000 nM, resp.). Replacement of the  
piperazine ring with other heterocycles lowered the 5-HT3 receptor  
affinity to a 310-3600 nM range and the selectivity vs. 5-HT4 receptors  
disappeared.

IT 207406-57-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(5-HT3 and 5-HT4 receptor affinities of naphtho[1,2-d]thiazole derivs.)

RN 207406-57-3 CAPLUS

CN Acetamide, 2-(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)- (CA INDEX NAME)

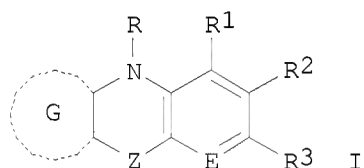


REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:126254 CAPLUS  
DOCUMENT NUMBER: 128:204878  
ORIGINAL REFERENCE NO.: 128:40519a, 40522a  
TITLE: Preparation of pyrazinobenzothiazine derivatives and analogs for the treatment of inflammation and autoimmune diseases  
INVENTOR(S): Kaneko, Toshihiko; Clark, Richard; Ohi, Norihito; Ozaki, Fumihiko; Kawahara, Tetsuya; Kamada, Atsushi; Okano, Kazuo; Yokohama, Hiromitsu; Muramoto, Kenzo; Arai, Tohru; Ohkuro, Masayoshi; Takenaka, Osamu; Sonoda, Jiro  
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 1344 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.   | KIND              | DATE     | APPLICATION NO. | DATE        |
|--|-------------------|----------|-----------------|-------------|
| WO 9806720   | A1                | 19980219 | WO 1997-JP2787  | 19970808    |
| W: AU, CA, CN, HU, JP, KR, MX, NO, NZ, RU, US                          |                   |          |                 |             |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |                   |          |                 |             |
| CA 2262569   | A1                | 19980219 | CA 1997-2262569 | 19970808    |
| AU 9737849   | A                 | 19980306 | AU 1997-37849   | 19970808    |
| ZA 9707103   | A                 | 19990208 | ZA 1997-7103    | 19970808    |
| EP 934941  | A1                | 19990811 | EP 1997-934750  | 19970808    |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI  |                   |          |                 |             |
| JP 4028894   | B2                | 20071226 | JP 1998-509589  | 19970808    |
| US 6518423   | B1                | 20030211 | US 1999-230852  | 19990405    |
| US 20040092737   | A1                | 20040513 | US 2002-247310  | 20020920    |
| PRIORITY APPLN. INFO.:   |                   |          | JP 1996-210344  | A 19960809  |
|  |                   |          | WO 1997-JP2787  | W 19970808  |
|  |                   |          | US 1999-230852  | A3 19990405 |
| OTHER SOURCE(S):   | MARPAT 128:204878 |          |                 |             |
| GI   |                   |          |                 |             |



AB The title compds. I [R1 to R3 are the same or different and each represents hydrogen, optionally substituted lower alkyl, optionally substituted cycloalkyl, etc., provided that when R1 to R3 are all optionally substituted lower alkyl groups, they do not simultaneously represent Me groups; R represents hydrogen, lower alkyl, etc.; E represents N, C, etc.; Z represents O, S, SO, SO2, etc.; and the ring G represents an optionally substituted heteroaryl ring having at least one nitrogen atom] are prepared I are useful in the treatment and prevention of inflammatory immunol. diseases, autoimmune diseases, rheumatism, collagen disease, asthma, nephritis, ischemic reflow disorders, psoriasis, atopic dermatitis or rejection reactions following organ transplantation. The compound (syn)-[3-(10H-pyrazino[2,3-b][1,4]benzothiazin-8-ylmethyl)-3-azabicyclo[3.3.1]nona-9-yl]acetic acid (II) at 10 mg/kg orally gave 65%

inhibition of carrageenin-induced inflammation in rats. II in vitro showed IC50 of 2.3  $\mu$ M against the expression of ICAM-1.

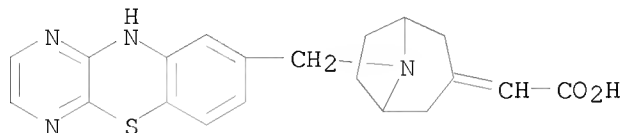
IT 203647-30-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazinobenzothiazine derivs. and analogs for treatment of inflammation and autoimmune diseases)

RN 203647-30-7 CAPLUS

CN Acetic acid, 2-[8-(10H-pyrazino[2,3-b][1,4]benzothiazin-8-ylmethyl)-8-azabicyclo[3.2.1]oct-3-ylidene]- (CA INDEX NAME)



REFERENCE COUNT:

46

THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:834157 CAPLUS

DOCUMENT NUMBER: 124:55731

ORIGINAL REFERENCE NO.: 124:10533a,10536a

TITLE: New 5-HT<sub>3</sub> (serotonin-3) receptor antagonists. IV. Synthesis and structure-activity relationships of azabicycloalkaneacetamide derivatives

AUTHOR(S): Kato, Masayuki; Ito, Kiyotaka; Nishino, Shigetaka; Yamakuni, Hisashi; Takasugi, Hisashi

CORPORATE SOURCE: New Drug Res. Lab., Fujisawa Pharm. Co., Ltd., Osaka, 532, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1995), 43(8), 1351-7

CODEN: CPBTAL; ISSN: 0009-2363

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis and structure-activity relationships of a series of new azabicycloalkanes as 5-HT<sub>3</sub> (serotonin-3) receptor antagonists are described. Our study on the azabicycloalkaneacetamide derivs. showed that 2,3-dihydroindole as the aromatic ring moiety afforded potent 5-HT<sub>3</sub> receptor antagonist activity, as judged by blockade of bradycardia induced by i.v. injection of 2-methylserotonin in anesthetized rats. 7-Azaindole as the aromatic moiety afforded weak 5-HT<sub>3</sub> receptor antagonists activity. The best 5-HT<sub>3</sub> antagonists in this study were endo-3,3-diethyl- and 3,3-dimethyl-2,3-dihydro-1-[(8-methyl-8-azabicyclo[3.2.1]oct-3-yl)acetyl]-1H-indole, being approx. 10-fold more potent than ondansetron. This study shows that the azabicycloalkaneacetyl group is a new pharmacophoric element as a basic nitrogen and a linking carbonyl moiety.

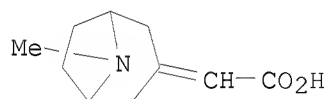
IT 5811-04-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation and structure-activity relationships of serotonin receptor antagonist azabicycloalkaneacetamides)

RN 5811-04-1 CAPLUS

CN Acetic acid, (8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)- (9CI) (CA INDEX NAME)

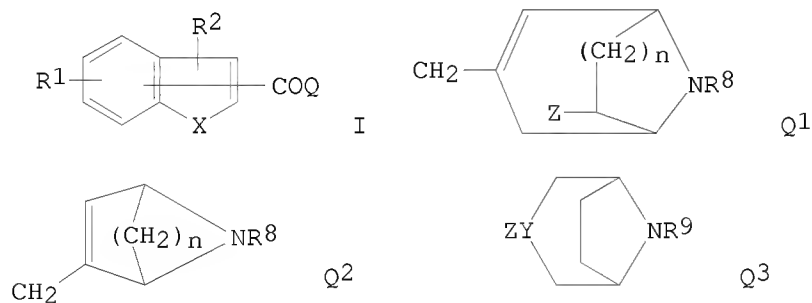


ACCESSION NUMBER: 1989:594605 CAPLUS  
 DOCUMENT NUMBER: 111:194605  
 ORIGINAL REFERENCE NO.: 111:32346h,32347a  
 TITLE: Carbocyclic and heterocyclic carbonylmethylene- and carbonylmethylpiperidines and -pyrrolidines as serotonin antagonists  
 INVENTOR(S): Richardson, Brian P.; Giger, Rudolf K. A.; Engel, Guenter; Furler, Roland  
 PATENT ASSIGNEE(S): Sandoz A.-G., Switz.  
 SOURCE: U.S., 14 pp. Cont.-in-part of U.S. Ser. No. 49,757, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| US 4826838 | A    | 19890502 | US 1987-70451   | 19870707 |
| BE 903984  | A1   | 19860707 | BE 1986-11412   | 19860106 |
| FR 2575750 | A1   | 19860711 | FR 1986-147     | 19860106 |
| FR 2575750 | B1   | 19880909 |                 |          |

PRIORITY APPLN. INFO.:  
 DE 1985-3500289 A 19850107  
 DE 1985-3500290 A 19850107  
 US 1986-815617 A1 19860102  
 CH 1987-759 A 19870227  
 GB 1987-5285 A 19870306  
 US 1987-49757 A2 19870513

OTHER SOURCE(S): MARPAT 111:194605  
 GI



AB Title compds. I [X = CH<sub>2</sub>, O, S, NR<sub>3</sub>; R<sub>1</sub>, R<sub>2</sub> = H, halo, C1-4 alkyl, C1-4 alkoxy, OH, (mono- or di-C1-4 alkyl)amino, SH, C1-4 alkylthio; R<sub>3</sub> = H, C1-4 alkyl, C3-5 alkenyl, (mono-C1-4 alkyl-, halo-, OH-, C1-4 alkoxy-, or phenyl-C1-4 allyl-substituted) Ph; Q = bicycylmethyl, e.g. Q<sub>1</sub> [R<sub>8</sub> = H, C1-4 alkyl, (substituted) Ph, alkenyl n = 1-3; Z = H, C1-4 alkoxy, Q<sub>2</sub> (II), 2,3,4,5-R<sub>4</sub>R<sub>5</sub>R<sub>6</sub>R<sub>7</sub>C<sub>6</sub>HCOQ [R<sub>4</sub>-R<sub>7</sub> = H, (mono- or di-C1-4 alkyl-substituted) amino, NO<sub>2</sub>, halo, C1-4 alkoxy, C1-4 alkyl, C1-4 alkanoylamino, pyrrolyl] (III), and I (X = NH, S; R<sub>1</sub> = H; R<sub>2</sub> = H, C1-4 alkyl; Q = Q<sub>1</sub>, Q<sub>3</sub>, R<sub>9</sub> = C1-4 alkyl; Y = CH:C, CH<sub>2</sub>CH) (IV) are prepared, as analgesics, antiarrhythmics and for treating gastrointestinal disorders. Wittig reaction of tropinone with Ph<sub>3</sub>P:CHCO<sub>2</sub>Me in C<sub>6</sub>H<sub>6</sub> in the presence of PhCO<sub>2</sub>H gave Q<sub>3</sub>CO<sub>2</sub>Me (R<sub>9</sub> = Me; ZY = CH:C), which was converted to Q<sub>3</sub>COCl in two steps followed by condensation with indole pretreated with MeMgI to afford I (R<sub>1</sub> = R<sub>2</sub> = H; X = NH; Q = Q<sub>3</sub>; ZY = CH:C, R<sub>9</sub> = Me) (V). II, III,

and IV inhibited 5-hydroxytryptophan-induced gastrointestinal motility in mice at 0.05-1 mg/kg i.v. and 0.1-3.0 mg/kg p.o. Tablets were formulated containing V 15.0, hydroxypropylcellulose 1.2, corn starch 13.0, lactose 93.7, silica 0.6, and Mg stearate 15 mg.

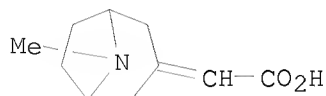
IT 5811-04-1P 123368-82-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of serotonin antagonist)

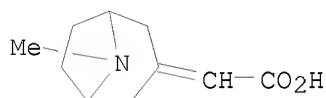
RN 5811-04-1 CAPLUS

CN Acetic acid, (8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)- (9CI) (CA INDEX NAME)



RN 123368-82-1 CAPLUS

CN Acetic acid, 2-(8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

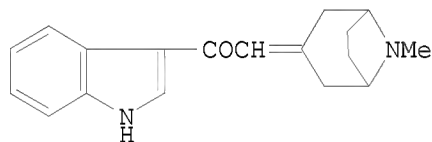
L3 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:608764 CAPLUS  
DOCUMENT NUMBER: 105:208764  
ORIGINAL REFERENCE NO.: 105:33663a, 33666a  
TITLE: Carbocyclic and heterocyclic carbonyl methylene- and  
-methylpiperidines and -pyrrolidines  
INVENTOR(S): Richardson, Brian; Giger, Rudolf; Engel, Guenter;  
Furler, Roland  
PATENT ASSIGNEE(S): Sandoz-Patent-G.m.b.H., Fed. Rep. Ger.  
SOURCE: Ger. Offen., 43 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| DE 3545981  | A1   | 19860710 | DE 1985-3545981 | 19851223 |
| CH 667657   | A5   | 19881031 | CH 1986-6       | 19860102 |
| GB 2169292  | A    | 19860709 | GB 1986-95      | 19860103 |
| GB 2169292  | B    | 19880921 |                 |          |
| BE 903984   | A1   | 19860707 | BE 1986-11412   | 19860106 |
| FR 2575750  | A1   | 19860711 | FR 1986-147     | 19860106 |
| FR 2575750  | B1   | 19880909 |                 |          |
| JP 61161282 | A    | 19860721 | JP 1986-1233    | 19860106 |

PRIORITY APPLN. INFO.: DE 1985-3500289 A 19850107  
DE 1985-3500290 A 19850107

OTHER SOURCE(S): CASREACT 105:208764; MARPAT 105:208764  
GI



I

AB Carbocyclic and heterocyclic carbonylmethylene- and -methylpiperidines and -pyrrolidines, whose piperidine and pyrrolidine rings are bridged with an alkylene bridge and optionally unsatd., with the condition, that in case the alkylene-bridged piperidine ring is a quinuclidine ring bound in the 3 position, the carbocyclic carbonylmethyl and carbonylmethylene groups are not PhCOCH<sub>2</sub> and PhCOCH: groups, as well as in case the alkylene bridged piperidine ring is a 3-tropanyl group, the carbocyclic carbonylmethyl group is not PhCOCH<sub>2</sub>. The compds. are analgesics, antiarrhythmics, 5HT-3-receptor antagonists and are useful in treating migraines and gastrointestinal disorders. Detailed information concerning tests and dosages was given. In an example, I was prepared in 4 steps from Ph<sub>3</sub>P:CHCO<sub>2</sub>Me, BzOH, and tropinone in C<sub>6</sub>H<sub>6</sub>.

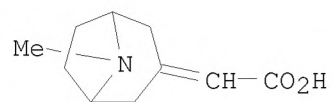
IT 5811-04-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and conversion of, to acid chloride)

RN 5811-04-1 CAPLUS

CN Acetic acid, (8-methyl-8-azabicyclo[3.2.1]oct-3-ylidene)- (9CI) (CA INDEX NAME)





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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

88.16

266.73

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-12.80

-12.80

STN INTERNATIONAL LOGOFF AT 10:30:24 ON 04 NOV 2008